

Phosphoric Acid Equipment



SUPERIOR QUALITY LININGS FOR PHOSPHORIC ACID EQUIPMENT

- Phosphoric Acid Evaporator
- Barometric Condenser
- Storage Tanks & Rail Cars
- Pipes & Pumps
- Dap Units & Scrubbers

Blair Rubber's personnel are experienced in designing and processing rubber compounds for highly corrosive and abrasive environments encountered in phosphoric acid equipment.

BLAIR'S **Enduraflex™** performance linings for phosphoric acid vessels and pipes are:

VE-621-BC (chlorobutyl), **Hotline II** (soft-hard-soft natural lining), and **VE822BBS** (semi-hard) for evaporators, condensers, storage tanks, and **Plioweld™ LS-582** for rail cars. **Plioweld™ LS-582** and **Enduraflex™ VE-621-BC** are the preferred linings of choice with **Hotline II** as a three-ply natural rubber lining that is replacing the older style applications.

Chlorobutyl **Tri-Bond™**, **Enduraflex™ VE-641-BC** is specially designed for the fluorosilicic/phosphoric acid evaporators. The chlorobutyl face offers greater chemical resistance to additives used in fluorosilicic acid (H₂SIF₆) production over the other multi-ply of rubber linings.

Enduraflex VE-822-BBS, 85 durometer semi-hard synthetic is designed specifically for scrubber applications and diammonium phosphate (DAP) units.

Natural rubber, three-ply lining constructions have been used through the years with considerable maintenance. To minimize maintenance and to enhance the linings for chemical resistance, chlorobutyl **Enduraflex™ VE-621-BC** and **Plioweld™ LS-582** have become the industry's preferred elastomeric linings.

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The primary reasons are due to its excellent chemical and heat resistance.

Enduraflex™ VE-621-BC and **Plioweld™ LS-582** have a higher tolerance to many of the additives and flocculants used in phosphoric acid production, storage, and transportation. It also offers flexibility being a homogeneous lining and eliminating cracking on bolted flange connections.

Enduraflex™ VE-641-BC Tri-Bond™ construction is designed specifically for hydrofluorosilicic acid (H₂SIF₆) units. This three-ply construction offers the center hard core rubber for enhanced moisture and chemical resistance. The top surface being chlorobutyl offers excellent benefits, such as chemical, heat, ozone and weather resistance.

Enduraflex™ VE-822-BBS, semi-hard synthetic, 85 durometer, flexible lining is designed to resist moisture and diammonium phosphate (DAP) absorption. The lining is also achieving excellent performance life in many scrubber applications.

To enhance the lining bond strength these lining constructions use **BLAIR'S "TACKY BACK BONDING METHOD"**. This unique bonding tie gum yields a positive bond even for non-pressure atmospheric cure. Bond values for exhaust cured equal autoclave pressure cured value of 50 to 70 pounds per inch. No adhesive or solvent is required on the tie gum backing for application. Thus, the use of BLAIR'S "TACKY BACK" tie gum reduces the environment VOC'S by 25%.

Contact BLAIR RUBBER's technical staff for assistance in selecting the correct lining for specific service conditions.